

### **Status of Claims**

Claims 1, 3, 5, 7, 9, 10, 13, 15-17, and 27-30 were pending at the time of this Office Action.

Claims 1, 3, 5, 7, 9, 10, 13, 15-17, and 27-30 were rejected.

### **REMARKS**

#### **35 USC §103 Rejections**

Claims 1, 3, 5, 7, 9, 10, 13, 15-17, and 27-30 were rejected under 35 USC §103(a) as being unpatentable over Wright, et al. (U.S. Patent No. 3,540,975) in view of Rose, et al. (GB 908,217).

Regarding claims 1, 3, 5, 7, 9, 10, 13, 15-17, 27 and 28, the Examiner asserts that Wright discloses a method of applying iron-on trims. The method includes providing iron-on trims with thermoplastic adhesive resin applied to one surface of a fabric, applying the iron-on to the textile material and applying heat to activate the thermoplastic adhesive, and if there is a need to adjust the position of the bonding, the iron-on only need to be heated again to soften the adhesive to permit the tape to easily be peeled from the laminate and repositioned and re-ironed and the adhesive has the property of allowing the iron on to be applied with light quick strokes of the flat iron to achieve temporary bond and if desired, be removed by simply pulling it from the garment or material, which is at room temperature, repositioning the iron-on, and using the flat iron with sufficient temperature, time and pressure to form a permanent bond.

The Examiner asserts that Wright discloses that the fabric can be any configuration for making, trimming or furnishing textile garments and articles, such as curtains, household decorations, tablecloths, furniture coverings or the like.

The Examiner takes the position that the recitation of household decorations would include quilting materials and/or backing materials. It is clear from the Examiner's position and from Wright itself, that Wright does not disclose quilting materials and particularly the use of specific thermoplastics to baste quilt batting to a quilt cover. The Examiner appears to relying on Common Knowledge in the art or Well Known prior art as discussed in MPEP 2144.03. The Applicant traverses the Examiner's position on the

basis that one skilled in the art understands a clear distinction between the fabrics disclosed by Wright and quilt batting, which distinction presents unique functional differences addressed by the present invention. The Applicant requests that the Examiner provide documentary evidence of his factual assertion as provided in MPEP 2144.03 C.

The Examiner notes that Wright is silent as to the fabric is a non-woven material, which provides loft.

The Examiner asserts that providing a non-woven material as reinforcement material is well known and conventional as shown by Rose. The Examiner asserts that Rose discloses a textile interlining material with hot melt material coating on one face of the material and the textile includes woven textile fabric, a felted textile fabric, or a material known as "bonded fiber fabric" which consists of natural or synthetic fibres laid at random, parallel, or cross laid and bonded by a resin or other bonding agent, i.e. nonwoven sheet, which would provide loft which are all functional equivalents.

The Applicant disagrees with the Examiner's reading of the teaching of Rose. In particular, the Examiner has asserted that the bonded fibre fabric of Rose would provide loft. Rose does not teach that any of the various fabrics would provide loft. There are many non-woven fiber materials that do not provide loft, for example Tyvek house wrap, which is also used to make shipping envelopes. The Applicant submits that the functional description of the non-woven fibrous web selected to provide loft to a quilt as included in the present claims clearly distinguishes such materials and is recognized as a distinctly different material by those skilled in the art.

It is true that Rose discloses an interlining material having a thermoplastic material on a surface for use in bonding the interlining to another sheet of material. However, an interlining material or interliner is recognized by those skilled in the art as something different from a quilt batt or batting. As noted by the Examiner, Rose teaches providing a nonwoven material as a **reinforcement material**. That functional description of an interliner is accurate and distinguishes it from a non-woven web that provides loft to a quilt.

As brought to the Examiner's attention in the previous response, U.S. Patent No. 7,109,134 issued on September 19, 2006 on Application Serial No. 10/712,462, which is

a CIP application from the parent of the present application and was filed on the same date as the present application. In prosecution of that patent, the Examiner cited the Lauchenauer U.S. Patent 3,922,418. The Examiner asserted that Lauchenauer teaches a heat-sealable textile sheet material suitable for use as an interlining for garments is prepared by applying to textile sheet material, or "non-woven fibrous web," a coating of thermoplastic resin particles as required by claim 3, or "heat sealable and releasable adhesive." Thus the rejection was very similar to the present rejection based on Rose. In that case, the Applicant responded by noting the differences between an interliner and a quilt batt. The Examiner did not repeat that rejection.

To demonstrate that interliners and batting are recognized as distinct textile structures, the Applicant submits copies of definitions from the INDA Nonwovens Glossary, including the cover page and pages 6, 7 and 30. The entire glossary is available on the internet at [www.inda.org/glossary.pdf](http://www.inda.org/glossary.pdf). An "Interfacing (Interlining)" is defined as "a fabric used in garments, to provide weight, thickness (or body) and stability." A "Batting" is defined as a "soft, bulky, assembly of fibers usually used for filling, formed by carding, garneting, air laying or other means. Layered carded webs are sometimes called a batt." These definitions are consistent with the Applicant's position. An interlining provides weight, thickness (or body) and stability, which characteristics are not desirable or useful in a quilt. On the other hand, batting is soft and bulky, which is what makes a batt or batting useful in a quilt.

The Examiner asserts that it would have been obvious to provide any textile fabric such as a nonwoven sheet with hot melt material coating on one face as disclosed by Rose in the method of Wright to provide a fabric material as the interlining materials which are all functional equivalents.

The Applicant traverses this rejection. As noted above, all nonwoven fabrics are not functional equivalents and are not interchangeable. While use of thermoplastics to bond non-woven fabrics to other fabric sheets may be known, the Examiner has not provided any reference that teaches or suggests that thermoplastics may be used to baste quilt batting to quilt covers in a method of making a quilt.

Regarding claims 29 and 30, the Examiner asserts that Wright discloses thermoplastic adhesive resin is tacky to adhere firmly to the surface of the fabric web, which binds to the fibers.

In the portion of Wright cited by the Examiner, Wright states that the adhesive adheres "firmly to the surface of the fabric web to which it is applied." Wright does not say that the adhesive binds to the fibers. Wright does not say that the adhesive binds the fibers of the web together. At the beginning of the same paragraph, Col. 3, lines 13-14, Wright states that "the resin extrusion does not penetrate into or through the fabric." It is not what binds the fibers together.

However, claims 29 and 30 are not directed to binding the adhesive to the fibers. These claims are directed to binding the fibers to each other. As noted in Rose, the bonded fibre fabric is made of fibers that are bonded by a resin. In claims 29 and 30, the same adhesive that bastes the batt to the cover also bonds the fibers of the web.

The Applicant submits that neither reference taken alone, nor any combination of the references, makes the presently claimed invention obvious.

## CONCLUSION

Applicant respectfully submits that the present application, as amended, is in condition for allowance. If the Examiner has any questions or comments or otherwise feels it would be helpful in expediting the application, he is encouraged to telephone the undersigned at (972) 731-2288.

The Commissioner is hereby authorized to charge any fees that may be due in connection with this communication, or credit any overpayment thereof, to Deposit Account No. 50-1515, Conley Rose, P.C.

Respectfully submitted,

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NONWOVENS ... ENGINEERED FABRIC SOLUTIONS

# INDA Nonwovens Glossary



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# Bb

## **BLC**

See **Barrier Leg Cuff**.

## **Back coating**

An adhesive type substance applied to the back side of a fabric for the purpose of locking pile yarn into a carpet backing, or bonding a secondary backing to the primary backing, increasing fabric body or stiffness, or imparting flame retardency to the fabric.

## **Backing**

A web or other material that supports and reinforces the back of a product such as carpeting or wallpaper.

## **Back sheet**

The exterior surface of a baby or adult diaper – generally made of film. The current trend is to improve absorbent products' aesthetics by adding a nonwoven material to cover the film, giving the outside of the product a cloth-like hand.

## **Bacteriostat**

Chemical additive that limits or prevents the growth of bacteria.

## **Bale**

A compressed and bound package of fiber – the common shipping package for fibers.

## **Bale breaker**

Opening equipment used to break open compressed bales of fiber into separated fiber clumps in preparation for carding.

## **Barrier leg cuff**

The raised cuff, which is generally a hydrophobic cover stock, used in baby or adult diapers and designed to contain body waste in the core area.

## **Basis weight**

The weight of a unit area of fabric. Examples are ounces per square yard and grams per square meter.

## **Batt**

A collection of fibers assembled into a sheet suitable for needlepunching bonding by some method. The term is synonymous with web.

## **Batting**

A soft, bulky assembly of fibers usually used for filling, formed by carding, garnetting, air laying or other means. Layered carded webs are sometimes called a batt.

## **Beam**

In the context of the spunlaid technology, the term refers to the large beam that contains the fiber spinning dies. In textiles, the term refers to a large spool containing many separate fibers wound parallel to one another for use in warp knitting or weaving.

## **Beater**

The machine that does most of the fiber separation and cleaning in the processes of picking and opening that occur before the fiber is made into a web.

## **Bicomponent (bico) fibers**

Fibers made of two different polymers extruded into one filament (core within a sheath or side by side are examples). One type of bicomponent fiber is produced using two polymers so chosen that one component softens at a lower temperature to act as a binder while the other component maintains the web's structural integrity. A second type of bicomponent fiber is splittable and with some form of mechanical energy applied, such as the hydroentangled technology, will separate into finer denier fibers.

## **Binder**

An adhesive substance used to bind a web of fibers together or bond one web to another. The adhesive can be in a solid form (powder, film or fiber), foam, or in liquid form (emulsion, dispersion, solution) to bond the constituent elements or enhance their adhesion.

## **Binder content**

The weight of adhesive used to bond the fibers of a web together – usually expressed in dry weight as percent of the fabric weight.

## **Binder fiber**

Fibers with lower melting points than other fibers with a higher softening point or non-melting fibers. Upon the application of heat and pressure, these fibers soften and adhere to other fibers in the web, thereby acting as a binder. Some binder fibers can be bicomponent. A solvent (e.g. water) can activate some binder fibers, which may not be thermoplastic.

## **Biodegradable**

The ability of a substance to be broken down by bacteria.

## **Bleaching**

Chemical treatment with compounds that release chlorine or oxygen to increase the whiteness of fibers and fabrics.

## **Blend**

A combination of two or more fiber types in making yarn or fabrics.



# Ii

## **Ignition**

The beginning of combustion.

## **Imbibition**

Liquid holding capacity of a fabric.

## **Impingement**

The process in which particles are removed from an airstream because of the inertia. As an air containing particle flows toward a filter fiber or other collecting surface, the particle does not follow the air streamlines because of its inertia. Instead it moves in a straight line, colliding with the filter fiber or surface to which it may become attached.

## **Industrial fabrics**

Textiles for non-apparel and non-decorative uses. Examples are wipers, cable wrappings and geotextiles.

## **Initial modulus**

A material's resistance to small deformations, defined as the slope of the stress-strain curve at the origin and sometimes used to indicate fiber stiffness.

## **Instron tensile tester**

High precision electronic test instrument that measures the elongation, tensile strength, tear strength or resistance to compression of materials while pulling or compressing forces are applied.

## **Interfacing (Interlining)**

A fabric used in garments, to provide weight, thickness (or body) and stability.

## **Inertia**

Any physical body persisting in its present state of rest or moving in a straight line motion unless acted upon by some external force.

## **ISO**

Acronym for the International Standards Organization based in Switzerland.

## **Isotropic**

A fabric having the same physical properties in every direction in the plane of a fabric. It is related to random distribution of fibers in a fabric.